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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/724,161 | 12/01/2003 | Kyung-Eun Lee | 46053 | 9389 |

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| EXAMINER |
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BOSS, BROCK N

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| ART UNIT | PAPER NUMBER |
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2623

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01/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/724,161 | | LEE ET AL. | |
| | Examiner | | Art Unit | |
| | Brock N. Boss | | 2623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37.CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/04/2007, 1/27/2005</u> | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. **Claims 1-14 and 16-24** are rejected under 35 U.S.C. 102(b) as being unpatentable by Kondou et al. (US Publication No. 2004/0062395).

Regarding **claims 1, 9, and 21**, Kondou discloses a hybrid digital broadcasting receiver and method for reproducing digital multimedia data, comprising: a broadcast receiving module comprising: a receiving section for receiving and demodulating (see Figure 2, element 124) a digital broadcasting data stream which includes a multiplexed and transmitted plurality of compressively encoded and scrambled programs (see page 3, paragraph 47); a first demultiplexer (see Figure 2, element 126) for demultiplexing said demodulated digital broadcasting data stream (see page 3, paragraph 49), and selecting and extracting digital broadcasting data corresponding to a program selected by a user (see page 3, paragraph 47); a conditional access section (see page 1, paragraph 2) for detecting conditional access information and decrypting said selected digital broadcasting data using said detected information; and a decoder module (see Figure 2, element 126 and/or 128) comprising: a second demultiplexer for demultiplexing a digital multimedia data stream which includes a multiplexed plurality of compressively encoded digital multimedia data (see page 3, paragraph 47); and a decoding section (see page 3,

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paragraph 52) (see also page 4, paragraph 61, for decoding digital broadcasting data output from said broadcast receiving module and digital multimedia data output from said second demultiplexer (see page 5, paragraph 65).

Regarding **claims 2 and 10**, Kondou discloses everything as claimed above. In addition, Kondou discloses the hybrid digital broadcasting receiver according to claim 1, further comprising a smart card (see Figure 2, element 112) for receiving said conditional access information and generating a scrambling key (see page 3, paragraph 55).

Regarding **claims 3 and 11**, Kondou discloses everything as claimed above. In addition, Kondou discloses the hybrid digital broadcasting receiver according to claim 1, wherein said conditional access information comprises program management information and subscriber management information (see pages 3-4, paragraph 60).

Regarding **claims 4 and 12**, Kondou discloses everything as claimed above. In addition, Kondou discloses the hybrid digital broadcasting receiver according to claim 2, wherein said conditional access section receives said scrambling key from said smart card and decrypts said digital broadcasting data (see page 3, paragraph 55).

Regarding **claims 5 and 13**, Kondou discloses everything as claimed above. In addition, Kondou discloses the hybrid digital broadcasting receiver according to claim 1, further comprising a multimedia module for supplying said digital multimedia data stream to said second demultiplexer (see page 5, paragraph 65).

Regarding **claim 6**, Kondou discloses everything as claimed above. In addition, Kondou discloses the hybrid digital broadcasting receiver according to claim 1, wherein said digital multimedia data comprises audio data and video data (see page 4, paragraph 62).

Regarding **claims 7**, Kondou discloses everything as claimed above. In addition, Kondou discloses the, wherein said second demultiplexer separates said audio data and said video data from said digital multimedia data stream (see Figure 1, element 142 and/or 144) (see also page 3, paragraph 49).

Regarding **claims 8 and 14**, Kondou discloses everything as claimed above. In addition, Kondou discloses the hybrid digital broadcasting receiver according to claim 1, wherein said broadcast receiving module and said decoder module are each formed in a single integrated circuit or a second integrated circuit chip.

However, Kondou does not explicitly cite using a single integrated chip.

It is old and well known in the art at the time of Applicant's invention to consolidate modules, such as receiving modules and decoder modules into a single integrated circuit for the predictable result of minimizing cost of energy to transfer data from a further distance to save money.

Regarding **claim 16**, Kondue discloses everything as claimed above. In addition Kondue discloses the device, wherein said conditional access information comprises program management information and subscriber management information (see pages 3-4, paragraph 60).

Regarding **claim 17**, Kondue discloses everything as claimed above. In addition Kondue discloses the device, further comprising a smart card interface for outputting said conditional access information to a smart card and receiving a scrambling key generated by said smart card (see pages 3-4, paragraph 60).

Regarding **claim 18**, Kondue discloses everything as claimed above. In addition Kondue discloses the device, wherein said conditional access section receives said

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scrambling key from said smart card and decrypts said digital broadcasting data (see pages 3-4, paragraph 60).

Regarding **claim 19**, Kondue discloses everything as claimed above. In addition Kondue discloses the device, further comprising a decoder module interface (see Figure 2, elements 128 and/or 126) for supplying said decrypted digital broadcasting data to said decoder module (see page 3, paragraph 59).

Regarding **claim 20**, Kondue discloses everything as claimed above. In addition Kondue discloses the device, wherein said device is formed in a single integrated circuit chip.

However, Kondou does not explicitly cite using a single integrated chip.

It is old and well known in the art at the time of Applicant's invention to consolidate modules, such as receiving modules and decoder modules into a single integrated circuit for the predictable result of minimizing cost of energy to transfer data from a further distance to save money.

Regarding **claim 22**, Kondou discloses the method as claimed above. In addition, Kondue discloses the method, further comprising the steps of: determining whether there is a request for receiving digital broadcasting from said user; and driving said broadcast receiving module and receiving said digital broadcasting data stream when said request is received (see page 3, paragraph 47).

Regarding **claim 23**, Kondou discloses the method as claimed above. In addition, Kondue discloses the method, wherein said conditional access information comprises program management information and subscriber management information (see pages 3-4, paragraph 60).

Regarding **claim 24**, Kondou discloses the method as claimed above. In addition, Kondue discloses the method, further comprising the steps of: supplying said conditional access information (i.e. scrambling key) to a smart card (see Figure 1-5, element 112) from said broadcast receiving module (see page 3-4, paragraph 60); generating a scrambling key at said smart card using said conditional access information (see page 4, paragraphs 65-69); and supplying said scrambling key generated by said smart card to said broadcast receiving module to decrypt said separated digital broadcasting data (see page 4, paragraphs 65-69).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kondue et al. (US Patent Publication No. 2004/0062395) in view of Abrams (US Patent Number 7,212,574 B2).

Regarding **claim 15**, Kondue discloses everything as claimed above. In addition, Kondue discloses the device for processing digital broadcasting data, comprising: a receiving section (see Figure 2, element 124) for receiving and demodulating a digital broadcasting data stream which includes multiplexed and transferred digital broadcasting

data packets and conditional access information packets for a plurality of programs (see page 3, paragraph 47); a demultiplexer (see Figure 2, element 126) for separating said conditional access information packets and digital broadcasting data packets for a program selected by a user from said demodulated digital broadcasting data stream (see page 3, paragraph 49); and a conditional access section (see page 1, paragraph 2) for detecting conditional access information from said conditional access information packets and decrypting said separated digital broadcasting data packets using said conditional access information (see page 3, paragraph 55).

However, Kondou does not disclose any error correction section.

In an analogous art, Abrams discloses error correction in a demodulated digital broadcasting stream (see column 21, lines 15-39).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Kondou's invention with a error correcting section for correcting error in a demodulated digital broadcasting data stream for the predictable result of preventing sending inaccurate data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brock N. Boss whose telephone number is (571) 270-1660. The examiner can normally be reached on Monday-Thursday 9:30-7:30 Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BB
January 5th, 2007



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